

What is claimed is:

1. A method for getting dump of a computer system that adopts virtual storage management by which virtual storage is available using main storage, auxiliary storage, and an address translation table for indicating a location in the main storage or in the auxiliary storage to which an individual virtual-storage area is allocated, said method comprising the steps of:

providing said auxiliary storage with first auxiliary storage and second auxiliary storage;

operating the computer system using either of the first auxiliary storage or the second auxiliary storage;

determining a location to which the address translation table is allocated, when occurrence of a failure in the computer system is detected;

determining a location in the main storage, or in the auxiliary storage, where information in the virtual-storage area is stored, which is described in the address translation table;

transferring the content of the virtual-storage area from the main storage to the auxiliary storage, if the content of the virtual-storage area is allocated to the main storage; and

switching the first auxiliary storage to the second

2. A method for getting dump according to Claim 1,
wherein:

3. A method for getting dump according to Claim 1,
wherein:

4. An apparatus for getting dump of a computer system that adopts virtual storage management by which virtual storage is available, said apparatus comprising:

a means for operating the computer system using
either of the first auxiliary storage or the second

auxiliary storage;

a means for determining a location in main storage, or in the auxiliary storage, where information in a virtual-storage area is stored, according to an address

5 translation table when occurrence of a failure in the computer system is detected;

a means for transferring content of the virtual-storage area from the main storage to the auxiliary storage if content of the virtual-storage area is allocated to the main storage, and if the content of the virtual-storage
10 area has been updated since the virtual-storage area was allocated to the main storage; and

a means for switching the first auxiliary storage to the second auxiliary storage for use if the first auxiliary
15 storage is used for operation, and for switching the second auxiliary storage to the first auxiliary storage for use if the second auxiliary storage is used for operation.

5. An apparatus for getting dump of a computer system that uses virtual storage, said apparatus
20 comprising:

auxiliary storage comprising first auxiliary storage and second auxiliary storage;

an address translation table for indicating a location in main storage, or in auxiliary storage, where
25 information in a virtual-storage area is stored;

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a means for transferring content of the virtual-storage area from the main storage to the auxiliary storage according to the address translation table when occurrence of a failure in the computer system is detected, if the content of the virtual-storage area is allocated to the main storage, and if the content of the virtual-storage area has been updated since the virtual-storage area was allocated to the main storage; and

a means for switching the first auxiliary storage to the second auxiliary storage for use if the first auxiliary storage is used for operation, and for switching the second auxiliary storage to the first auxiliary storage for use if the second auxiliary storage is used for operation.

6. A method for getting dump of a computer system that uses virtual storage, said method comprising the steps of:

controlling the virtual storage according to an address translation table that indicates a location in main storage, or in first auxiliary storage, where information in a virtual-storage area is stored;

storing content of the virtual-storage area, which has been updated since the virtual-storage area was allocated to the main storage, in the first auxiliary storage according to the address translation table when occurrence of a failure in the computer system is detected;

and

switching the first auxiliary storage, which is working, to the second auxiliary storage.

7. A method for getting dump of a computer system that uses a plurality of pieces of virtual storage, said method comprising the steps of:

controlling each of the plurality of pieces of virtual storage according to an address translation table corresponding to each virtual storage, which indicates a location in main storage, or in first auxiliary storage, where information in each area of the plurality of pieces of virtual storage is stored;

storing content in each area of the plurality of pieces of virtual storage, which has been updated since the area of the virtual storage was allocated to the main storage, in the first auxiliary storage according to the address translation table when occurrence of a failure in the computer system is detected; and

switching the first auxiliary storage, which is working, to the second auxiliary storage.

8. A method for getting dump of a computer system that uses virtual storage, said method comprising the steps of:

controlling the virtual storage according to an address translation table that indicates a location in main

storage, or in first auxiliary storage, where information in a virtual-storage area is stored;

saving the address translation table in the first auxiliary storage if page-out occurs in the address

5 translation table; and

storing content of the virtual-storage area, which has been updated since the virtual-storage area was allocated to the main storage, in the first auxiliary storage according to the address translation table when
10 occurrence of a failure in the computer system is detected; and

restoring the address translation table, which has been saved in the first auxiliary storage, in the main storage before switching the first auxiliary storage, which
15 is working, to second auxiliary storage.

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